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CONSOLIDATED REPORT BASED ON TWO INTERROGATIONS OF OBERST RANDEWIG, OF HOEH. WEHRMACHTS NAFUE z.b.V. 700, CARRIED OUT AT C.S.D.I.C. on approx. 1 Aug. & 10 Aug. 1945.

Report is mainly an historical account of P.W.'s Signal career, with special reference to HUSUM station.

TICOM
15 August 1945

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REPORT ON INTERROGATION OF OBERST RANDEWIG

ON APPROX. 1 AUGUST AND 10 AUGUST 1945 AT CSDIC

Interrogators : Capt. Carter Br. Army
Capt. Ginsberg U.S.Army
Lieut.Holmes "
Lieut.Goldschmidt "

Historical

Son of a professional Army officer, P.W. was born at NEISSE on 7 February 1898. His schooling was somewhat broken up as he followed the moves of his father from post to post. The places at which he attended were Potsdam, Magdeburg, Kuestrin and finally Graulenz where he took his Abiturium. His education was a classical one.

He originally intended to study architecture, but owing to strain on his father's financial resources, he entered the Army as a subaltern in July 1914. His regiment was the GARDE TELEGRAPHIE BTN. in Berlin.

Dec. 1914-1918 Employed exclusively on the Western Front where his appointments were successively -
Telephone Abt. of VII Corps.
Stab of GKDO,
Adjutant of Officers' Training Course

1918 Joined the Freikorps and at end of 1919 went to the Grenzschütz Ost.

1920 On 1st October he was taken into the Army of 100,000 and became Adjutant of the Reiter Abt. 3 at Potsdam.

1922-23 Was at W/T School in Jütebog.

1923-25 Adjutant of Regt. Kdr. of Signals Troops in Gruppen Kdo 2 (Army Group),Cassel.

1925-27 Promoted Oberleutnant and became Zugführer of Signals Abt 5 in Stuttgart.

1927-29 Held same appoimtment with Signals Abt. 1, Koenigsberg.

1929-33 Was on Staff of 1st Division as O.C. W/T interception in Koenigsberg and was promoted Captain in 1932. On 1/4/33 P.W. was Staff Captain at Signals Abt. 4 in Lresden and then company commander of W/T company.

1934(Nov.)C.S.D. of Gen. Kdo 9 in Cassel.

1936(end) Promoted Major and ran the radio courses at the Army Signals School.

1938(April) O.C. Signals Training and Experimental bt. P.W. took part in the invasion of Austria.

1939 P.W. was in charge of three signals intercept companies in the West Wall, It was feared at the time that the French would invade Germany and P.W.'s job was to detect this.

1939 (Aug.) Mobilisation. P.W. was then O.C.Signals Operational Abt. of the Army Advance Guard. At this time there were two fixed intercept stations in the West-Stuttgart and Muenster. P.W's next job was Signals Interception at Zossen against Poland.

In mid September 1939, he became O.C. Intercept Troops, West and helped

to build up the new Army H.Q. at Giessen.

His commitments were against France, Belgium and Holland inclusively. According to P.W. there was nothing to watch in England.

1940(April) Intercept troops were split up into three Army Groups(B.A. and C.).Each had an O.C. Signals Interception and P.W. was O.C. Signals Interception with Army Group A, with Rundstedt as G.O.C.

Till the end of June P.W. had under his command 3 companies and studied French communications exclusively.

On 1st July 1940, English communications were studied. Facilities available were the fixed intercept staion at Husum, the Muenster station (removed to the Hague) and Euskirchen (removed to Boulogne).There were also two mobile intercept companies together with D/F sections. These activities went on until April 1941. Runstedt then went to the Eastern Front and asked that P.W. accompany him. The Army Group became Army Group South and P.W. was promoted to Lt. Colonel and to Colonel in 1942. There were three companies engaged in Signals interception against the Russians.

1942(Oct.)P.W. was to have become C.S.O. 3rd Rumanian Army but fell ill.

1943(Feb/March) Posted to Fuehrerreserve at Halle.

" (April) Became C.S.O. AOK 15(Holland and Seine area)

" (July) Re-posted to Fuehrerreserve, as result of indiscreet criticism of the regime.

" (Oct.) Proceeding against him stopped and he was given a warning.

" (Dec.) P.W. became C.S.O. of AOK 8 located between Rumainia and Kiev, where he stayed until Aug. 1944.

1944(Aug.)Ordered suddenly by OKH to be responsible for all questions concerning W/T in connection with rockets. Stayed at H.W.A. Berlin till end of August 1944.

" (Sept 1.) Under General Dornberger in Schwedt. It was on this date that the use of rockets(V2) was ordered by SS.Obergruppenfuehrer Kammler. P.W. was ordered to Cleve to join Kammler's staff. He was with Division 2 b.V.1191 Signals Abt. and dealt with signals communications within the Division as well as the special job of W/T interception within the Div. P.W. explained that it was feared at the time that similar weapons would be used by the Allies against Germany.The special job consisted of keeping a watch on all signals which might be found to be control beams or signals for such weapons.

1944(Nov.) P.W. was appointed Heeresnachrichtenfuehrer Z.b.V.700(Army C.S.O.). His H.Q. was at Potsdam and operated for the Wehrmacht (as distinct from the Army alone).He was only concerned with impulse traffic-beams, jamming and remote detonation.

1945 (Feb.)By this time this particular work became impossible, as bombing and allied advances made any form of liaison impracticable.In this month, P.W. became responsible for the reorganisation of Decimeter communications and W/T teleprinters of the Army.This lasted until the end of March or middle of April.

ON this commission two main tasks were comprised:-

1. The setting up of Decimeter communications with the cut-off Army Group in Courland.
2. The setting up of Decimeters communications between Berchtesgaden and Ploen after the American breakthrough had cut Germany in two.

This was working on 12 April and continued to do so until the capitulation.

1945(April-May) Kdr. der Fuehrungsnachrichtentruppen Nord.Subsequently Nachtrichtenfuehrer Armee Gruppe Blumentritt. Until 9 July '45 P.W. was Kdr. Telegraphenbau Regt. RANDEWIG. After the capitulation P.W. worked under British direction.

General

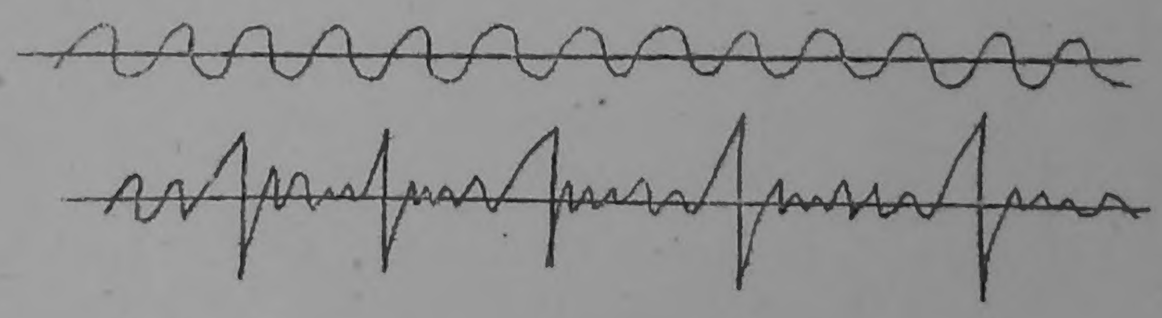
P.W. is a technician who is very keen on intercept problems. From 1940-42 he bombarded the Chief Sigs. Officer of the Wehrmacht with memoranda on the necessity for a centralised control of intercept and on the need for setting up a centralised intercept unit staffed by, at least, 3,000 technicians. As a result of this agitation, he came under the cloud mentioned above, and was pushed out of the intercept service until Aug. '44, when he was recalled to advise on certain problems of V2 operations. (These problems which concern DFing and steering of the rocket, are being dealt with in conjunction with M.I.14(f)).

Finally, in Nov. 1944, when it was already too late, P.W. saw his wish gratified and was appointed Wehrmachts Nachrichtenfuehrer z.b.V 700.

Answers to specific questions

1. Husum Station(Feste Wehrmacht Horchstelle) This is almost midway between SCHOBUELL and HUSUM town. P.W. states that the station was occupied by British troops and fears that damage may have been done to the installations there. There was no destruction of equipment carried out by the Germans, although secret files and documents were almost certainly burnt.

A considerable volume of unidentified traffic ranging between 30 and 60 Kcs. was picked up by means of an intercept receiver coupled to a TONSCHREIBER(sound film recorder).This traffic was as shown below:-



The exact country of origin or even the nature of this traffic was still undetermined. It was intended to collect a large store of Tonefilms and records, and eventually to compile a traffic library from which it would be possible to determine the nature of the traffic that was being picked up. By identifying this traffic, Randewig hoped to ascertain the scope of Allied jamming and the existence of new and special links which were not being exploited. In addition a certain volume of radar impulses was also picked up at Husum. This material would have been useful in considering the development of radar counter-measures. The information at Husum came, however, too late, and it was impossible to bring the matter beyond the initial research stage. As far as P.W. is aware, Husum intercept station with its special equipment was captured intact by the British.

Kahle Asten(Near WINTERBERG) This station, in a hill near the Ruhr, carried out similar activities to those described for Husum and also specialised in attempts to pick up allied decimeter traffic. While the station was in operation,P.W. states that ,owing to the electrical disturbances in the area, no positive information on Allied decimeter traffic could be obtained.

Feldberg. This station is right at the top of the hill of that name, shown on GSGS 4346 K48 as being 1493 m. in height.

Capt. RISTAN This officer was O.C. fixed W/T station HUSUM. In April 1945 he went with 100 men to Senior Commander of W/T Interception West and was probably captured south of Hamburg.

Inspektor KOLLAK. He replaced Capt. Ristan as O.C. HUSUM and remained there until the end. He was last seen by P.W. on the 5th May in HUSUM.

Ing. VETTERLEIN, Ing. HABEKANT and Herr HESS are all unknown to P.W.

The exact address of the Potsdam HQ is Garde du Corps.KASERNE, LEIBSCHWADRON,KANAL 68

Wehrmachts Nachrichtenfuehrer z.b.V. 700

This unit was set up in Nov. 1944 and directly subordinated to the Chef WNV. It had a staff consisting of a commander, technical specialists and liaison officers from the Army, Navy, Air Force and S.S.

The original object of this unit was to study the problems of remote control(wireless steering), remote detonation and remote jamming and to devise countermeasures to ememy attempts in this field. As work of this nature involved a study of wireless activity along all wavelengths,P.W. acquired the additional task of covering up all gaps in the German intercept scheme. He was particularly obliged to investigate traffic in the centimeter and decimeter wavelengths, which had been completely ignored by the various organisations of the German"Y"service.

The facilities for achieving this overall cover were inadequate. Wehrm. Nafue.Z.b.V.700 had about 300 men, a main intercept station at Husum and two subsidiary stations at KAHLE ASTEN and on the Feldberg in the Black Forest(see Above)

In order to rationalise the intercept programme satisfactorily, a conference was held in Dec. '44 between all intercept parties, in order that P.W. could learn which wavelengths were being catered for by different organisations. The conference was attended by signals and intercept representatives of the Army, Navy, Air Force, SS, and Reichspost, as well as certain technical specialists. The conference was only partially satisfactory, as certain organisations, particularly the RSHA, were very chary in giving precise information as to which wavelengths they were using for their agents traffic.

Reorganisation of W/T teleprint and Decimeter Communications

Additional activities carried out by Wehrm. Nachrichtenfuehrer z.b.V.700 included the reorganisation of the W/T teleprinter and decimeter communications of the Armed Forces.

In particular this involved a tactical reshuffling of the W/T teleprinter units with O.B.West, the inauguration of decimeter communications to the isolated Heeresgruppe NORD between SWINEMUENDE and PILLAU, and the institution of North-South communication in Germany after the American break-through in Thuringia. This last task was accomplished by the construction of a decimetre link from Berchtesgaden - Predigtstuhl - Gross Aber - Fichtelberg - Belzig - Berlin - Wismar - Ploen. It was operated with the assistance of balloons, which were sent up every night. The decimetre link which connected those elements of OKH in the North with those in the South functioned very satisfactorily from 10 March 1945 until the end of April 1945 when it proved impossible to send up balloons over Berlin.

The whole set was taken into the balloon with its battery power supply and one operator. The latter was found to be necessary as the swinging of the balloon also swung the beam from the station being worked. The

operator was able to correct for this swinging. Beam aerials were always used for transmission. The connection to ground was by the usual Styroflex cable which formed the core of the single retaining rope for the balloon. Signals were sent down and up at low frequency. P.W. complained that only two-channel sets were used in this work and only R/T was sent despite his admonitions to use T/P. He thought it extremely unlikely from his knowledge of Russian equipment and methods that the traffic was being monitored by them, although the beam in several cases went right over their heads.

During experiments in Germany, a distance of 450 Kms. had been satisfactorily worked with the transmitter in a balloon, moored on the top of a hill and working to a station also on the top of a hill but on the ground. The balloon could be sent up to 1600 metres. Experiments were also being made in reception from balloons but no results could be achieved conclusively by the time the war ended.

Remote Detonation

The problem of finding counter-measures to deal with remote controlled detonation never materialised as P.W. was unaware of any allied plans in this matter. Only once did he deal with remote controlled detonations, namely in KIEV in 1941, when, as the local intercept commander, he was ordered to take counter-measures against wireless controlled explosives which were going off in the town. He speedily evolved a jamming plan to frustrate them.

The carrier frequency of the signals lay in the 400 - 600 Kcs. band and the form of the signal was "pips" of modulation.

Jamming

A jamming policy was considered by Wehrm. Nafue z.b.V. 700 in Jan. and Feb. 1945. P.W. planned to jam allied AFV traffic by means of special jamming sets. Owing to production difficulties these sets were only available in Feb. due to the special delays in the arrival of broad-band modulators. This jamming equipment, operated by a specially trained unit was committed in Italy in conjunction with Kdr. d. Nachr. Aufkl. 7 with orders to jam the wireless traffic of an allied armoured division (probably 1st U.S. Armoured Div.). The jamming did not start as the Div. abandoned wireless traffic at the crucial moment. The jamming section went over to combat arty. recce. planes, apparently successfully, as messages were intercepted to the effect that tactical reconnaissance had to be broken off owing to the jamming of the wavelengths.

Technical

Although the official HUSUM range was 10 cms. - 100 cms., signals on other bands could be and were passed to HUSUM for monitoring and examination but P.W. could not remember details.

The HUSUM station had some 24 different types of set; these according to P.W. should still be on the station. There were gaps in the enormous band which the station had to be capable of studying and these were being filled in at the time of the capitulation. In many cases these latest sets had no official number but were known by code-names. P.W. remembered one - "STECKMUECKE" - which was a centimetre set. P.W. could give no circuit details whatever of any of the sets, saying that all that was left to Inspector KOLLAK.

All types of aerials were used at the station including HORN aerials, but P.W. stated there were none with parabolic reflectors.

Standard Styroflex cable was used as transmission line from the aerials to the sets. Wide-band amplifiers were employed but were not liked except for search purposes. P.W. maintained that the use of wide-band amplifiers was bound to lead to a certain amount of overcoupling. Once a signal was

found, it was picked up on a suitable aerial which was then used exclusively by one set until observation ceased. Any aerial could be plugged into any set.

Equipment on the station included magnetic tape recorders in about 3 marks. These were differentiated by the frequency ranges taken - again details could not be supplied.

Cathode ray oscilloscopes were, naturally, widely employed and P.W. spoke very favourably of panoramic scanners. These were only in the development stage and only a few were obtainable. Three were used to cover the 10 cms. - 100 cms. range; they employed a linear trace. P.W. stated he only wished he could have had sufficient to cover all bands.

One interesting device developed by the Reichspostzentralamt was mentioned by P.W. though without details. It is difficult to see on what principle it works. Four models were made and it was unofficially known as a "Registrier Geraet". It was a large dial set in front of the operator over which a cursor was free to move. If the operator was covering, say, the band 3000 - 5000 Kcs. the set would indicate the portions of the band on which there was activity at any given moment. No other details were known to P.W. who did, however, say it worked exceedingly well. Here again, Inspector KOLLAK would be able to provide the missing information.

The method of operation was as follows:- A large index was compiled giving the frequency ranges of all captured and German apparatus. Then, on a noise being picked up, the index was consulted to see what sets were likely to emit the noise at the frequency of interception.

The next stage was to compare the signal (waveform, frequency, etc.) with signals of known German or captured allied apparatus.

The third stage was to D/F the signal. P.W. stated that most of the signals heard were never identified but some were - no details could be given. Some 5000 signals were recorded and a duplicate of this index was made at Potsdam and Husum. P.W. is almost certain that these were destroyed.

Personnel

(Potsdam) Officers who worked under P.W. at Potsdam were:-

Oblt. SCHULTZE	Adjutant
Capt. Fuss	Army Liaison
Lt.Col. Sy.	GAF "
Kap.Lt. Opalka	Naval "
Hauptsturmführer Schroeder	SS Liaison
SIGL	Technical official.

(Husum)

Capt. RISTAN
Inspector KOLLAK
Plus liaison officers from the services.

Non-Morse P.W.'s organisation had nothing to do with non-morse interception. This, he said, as far as the Army was concerned, came under Col. HENIGST and Versuchstelle Staats was one of the stations involved in this work. It was a special unit controlled by Wa. Pruef. 7 of the HWA. For the GAF, Col. FRIEDRICH did this work and for the Navy, Kapt. zur See KUPFER and Admiral KRAUS.

P.W. had no knowledge of the tapping of the trans-Atlantic cable. If it was done, he thought that the Forschungsamt would have been responsible.

Interrogator's note

Suggest that KOLLAK be collected and questioned in presence of ADI(Sc) representative.